

**Training Document for the
Pathfinder Page
Version 1.1**

14 January 2002

**Prepared for
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1. Background

The Pathfinder Page is designed to provide FAA users and National Airspace System (NAS) users with a shared understanding of which flights are candidates to be pathfinder flights. It is a NAS user that decides, based on pilot qualifications, aircraft equipage, and other factors, whether a flight is a candidate to be a pathfinder; in the past, there has been no satisfactory way for a NAS user to communicate that to the FAA. This page allows the airlines to enter flights so that the FAA can know without making phone calls which flights are pathfinder candidates.

The Pathfinder Page consists of the following pages.

- **Main Page:** This shows the flights that are candidates to be pathfinders.
- **Comment Page:** This allows a user to edit the data for a flight, to enter explanatory comments about a flight, or to see comments that have already been entered. It also allows a user to delete a flight.
- **Add Flight Page:** This allows an user to add a flight to this page.
- **Status Page:** This allows the FAA to indicate whether this page is actively being used.
- **Printer Friendly Page:** This reformats the information in the main page so that it can conveniently be printed and cut-and-pasted.

Each of these pages is explained below.

In this document the term “user” refers to anyone who is using this page, i.e., to any FAA or NAS user who is accessing this page. When necessary, the terms “NAS user” or “FAA user” will be utilized to indicate the particular type of user referred to. The term “NAS user” refers to the operator of any airline, general aviation, or military flight. Initially, the airlines are the NAS users that will primarily have access to this page, though some GA users might have indirect access through the NBAA desk at the Command Center; the users that have access to this page might change over time.

2. Main Page

2.1 Introduction to the Main Page

Figure 1 shows a screenshot of the Main Page that shows a typical display of data. Each line shows one pathfinder candidate flight and information about it. The FAA’s assumption is that every flight on this page is willing to be a pathfinder, and the FAA can choose one or more pathfinders from among these flights. The next few sections explain what this data is, how a flight gets on this page, how it is removed, and how the data for each flight is determined.

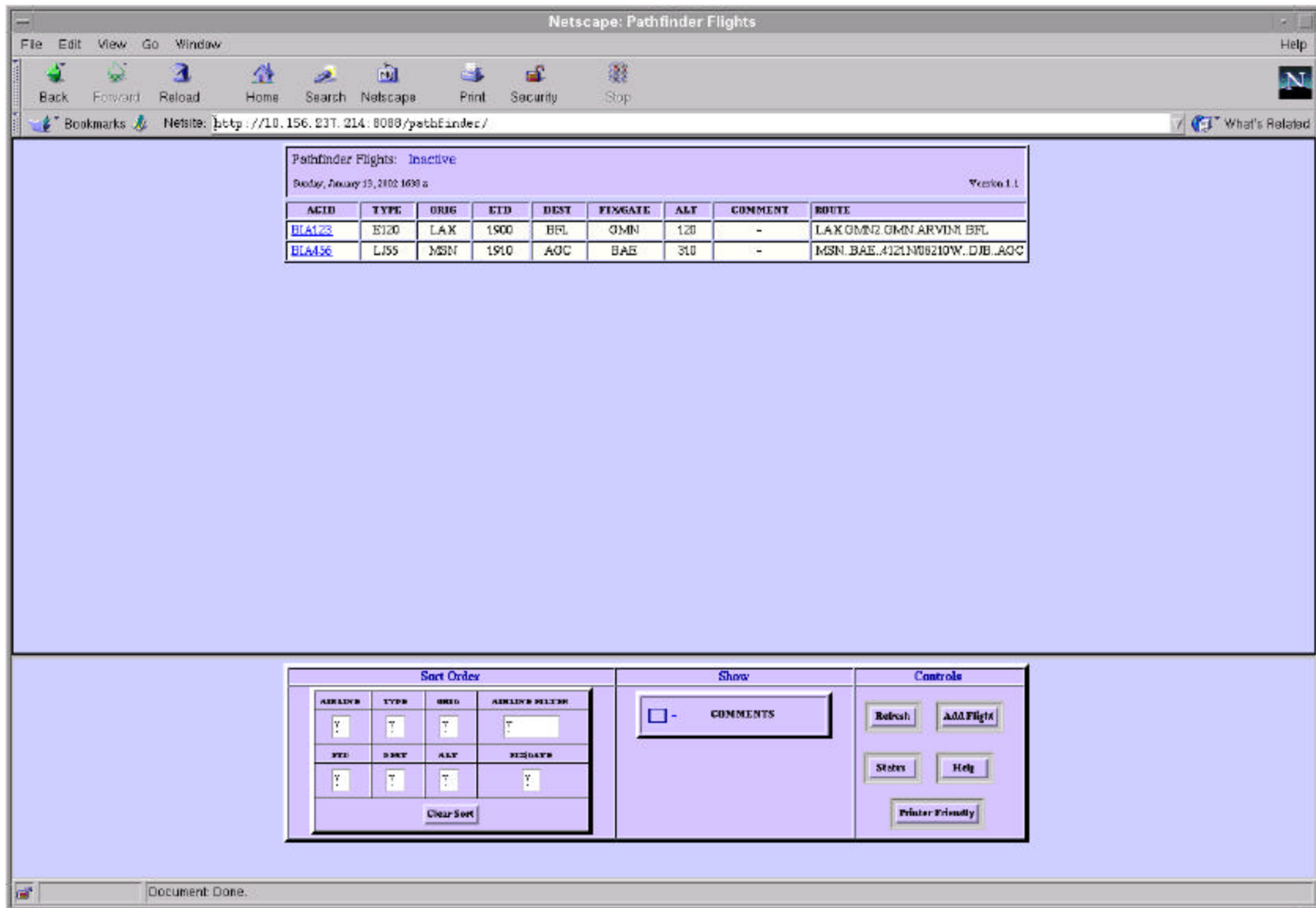


Figure 1: The Main Page

In this version any user will see all flights on the Main Page; it remains to be seen whether this will remain true in future versions.

A user can at any time return to the Main Page by clicking the **Refresh** button in the Control Panel (explained below).

2.2 Description of the Data Fields

The following data is shown on the Main Page for each pathfinder flight.

- *ACID*
Call sign of the flight.
- *Type*
Aircraft type, e.g., B757
- *ORIG*
Departure airport of the pathfinder flight.
- *ETD*
Estimate time of departure. This is the estimated wheels-up time at the departure airport.
- *DEST*
Arrival airport of the pathfinder flight.
- *FIX/GATE*
The departure fix or departure gate that the flight plans to use.
- *ALT*
The cruising altitude that this flight plans to use.
- *Comment*
Shows if there is a written comment on this flight and if the Tactical Customer Advocate (TCA) at the Command Center has acknowledged it.
- *Route*
The relevant part of the route that the flight plans to fly in field 11 format.

2.3 How a Flight is Placed on the Main Page

The only way that a flight gets onto this page is if a user manually enters it. The usual case is that a NAS user will enter it (or perhaps a representative of a NAS user, e.g., the personnel at the NBAA desk at the Command Center).

2.4 How a Flight is Removed from the Main Page

There are two situations that will cause a flight to be removed from this page.

- A user can manually delete any flight. To do this, click the flight's call sign to go to the Comment page, then click the **Delete Flight** button.
- If a flight is still on the page 60 minutes after its ETD, then it is automatically deleted.

By default, if any flight is still on the page 60 minutes after its ETD, it is automatically removed; the parameter of 60 minutes is configurable, and it might be changed if this proves desirable.

3. Control Panel

3.1 Introduction to the Control Panel

At the bottom of each of the pages is the Control Panel, which is shown in Figure 2. The Control Panel allows a user to control what data appears on the Main Page, to control how it is sorted and filtered, and to move among the various pages. Each of the capabilities of the Control Panel will be explained.

The Control Panel is divided into three main sections:

- Sort Order:** Contains a table for sorting flights by various criteria. The table has four columns: AIRLINE, TYPE, ORIG, and AIRLINE FILTER. Below the table are buttons for ETD, DEST, ALT, and EN/GATE. A 'Clear Sort' button is located at the bottom of the section.
- Show:** Contains a checkbox and a label 'COMMENTS'.
- Controls:** Contains buttons for Refresh, Add Flight, Status, Help, and Printer Friendly.

Figure 2: The Control Panel

3.2 Sorting the Flights

In the leftmost portion of the Control Panel are sort boxes that allow the user to sort the flights on the Main Page in the desired order. For example, an air carrier might want to see all its flights together, and within its flights it might want to see all those with the same destination airport together, and it might want to see these flights with the same destination airport sorted by ETD. To achieve this sort, it would need to do the following.

1. Click in the **AIRLINE** box and enter **1**.
 2. Click in the **DEST** box and enter **2**.
 3. Click in the **ETD** box and enter **3**.
 4. Click **Refresh**.
- The flights will be displayed in the desired order.

To return to the default order of flights, click **Clear Sort** and then **Refresh**.

To define a new sort order, click the **Clear Sort** button to blank out all the sort fields.

3.3 Filtering by Airline

If a user only wants to see the flights of particular airlines, he or she can enter the relevant three letter identifiers in the *Airline Filter* field. For example, if a user enters **AAL EGF** in the *Airline Filter* field and clicks the **Refresh** button, only flights of American and American Eagle will be displayed. These airline filters only affect the user who enters them and have no effect on other users.

3.4 Controlling the Data that Is Displayed

In the middle of the Control Panel is a check box labeled 'COMMENTS' that control whether any comment for a flight will be shown on the main screen underneath the line of data for the flight. This lets you see the comments without going to the Comment Page. If this box is unchecked, then comments are not shown on the Main Page. This check box only affects the user who checks or unchecks it; it has no effect on other users.

After checking or unchecking this check box, click **Refresh** to cause the change to take effect.

3.5 Navigating Around the Pathfinder Page

In the rightmost portion of the Control Panel are buttons that have the following action when clicked.

- **Status:** Takes an FAA user to the Status Page. (This button is not available only to the FAA and not to NAS users.)
- **Refresh:** Takes the user to the Main Page, or causes changes made to other portions of the Control Panel to take effect.
- **Add Flight:** Takes the user to the Add Flight Page.
- **Printer Friendly:** Takes the user to the Printer Friendly Page.
- **Help:** Takes the user to the Help Page.

Each of the pages referred to is explained in this document.

3.6 Adjusting the Size of the Control Panel

A user can adjust the amount of space that the Control Panel takes up on the screen in the following way.

1. Click at the top of the Control Panel. A horizontal line will appear. (If this horizontal line is already visible, then this step is unnecessary.)
2. Place the pointer on this horizontal line so that the pointer icon changes from an arrow to a pair of horizontal lines.
3. Drag the horizontal line up or down until the amount of space allotted to the Control Panel is adjusted as desired.

4. Add Flight Page

The only way that a flight gets onto this page is if a user manually enters it. The assumption is that if a NAS user has a flight that is a candidate to be a pathfinder, then that NAS user will enter it on this page to make the FAA aware of this fact.

To manually add a flight to this page, do the following.

1. Click the **Add Flight** button in the Control Panel.
This causes the Add Flight Page to appear. See Figure 3.
2. Fill in the fields in the Add Flight dialog box.

3. Click the **Submit Flight** button.
The flight will be added to the page.

In filling out the fields on the Add Flight Page, the following rules must be observed to pass the error-checking.

- *ACID*: Enter at least two and no more than seven characters. The first character must be a letter.
- *Type*: Do not leave this field blank.
- *Orig*: Enter three or four characters.
- *ETD*: Enter a legal UCT time in four digits with no colon.
- *Dest*: Enter three or four characters.
- *Fix/Gate*: Do not leave this field blank.
- *Route*: Do not leave this field blank. You do not need to enter the entire route, but you should enter as much as is relevant to the pathfinding.
- *Author*: Enter at least two characters.
- *Altitude*: Enter an altitude in hundreds of feet, e.g., 270, or a range of altitudes, e.g., 270-310.
- *Comment*: Optional. This can be left blank.

Netscape: Pathfinder Flights

File Edit View Go Window Help

Back Forward Reload Home Search Netscape Print Security Stop

Bookmarks Netsite: <http://10.156.237.214:8080/pathfinder/> What's Related

Pathfinder Flights -- Add Pathfinder

ACID	TYPE	ORIG	ETD	DEST	FIX/GATE
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

ROUTE

Author: Altitude:

Comments:

Sort Order

AIRLINE	TYPE	ORIG	AIRLINE FILTER
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
ETD	DEST	ALT	FIX/GATE
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Show

☐ - COMMENTS

Controls

Figure 3: The Add Flight Page

For example, Figure 4 shows how to add flight BIA789 to the page; Figure 5 shows that it has been added to the Main Page. A flight that is manually added will be removed either 60 minutes after the ETD or whenever it is manually removed with the **Delete Flight** button (see below). The data on this flight will not be automatically updated by ETMS. If the data on a flight changes, then the user that added it should enter the updates by using the Comments Page.

5. Comment Page

5.1 Providing Information to the FAA

The Comment Page provides the following functionality.

- It allows a NAS user to edit any data about a flight that has changed. For example, if the ETD changes, the NAS user can use the Comment Page to make this edit.
- It allows a NAS user to enter or edit a comment about a flight.
- It allows the TCA to acknowledge a new or edited comment.
- It allows a user to delete a flight.

When at the Main Page, click the call sign of a flight to go to the Comment Page; see Figure 6. Then enter any new or edited information and click the **Submit Change** button; you will return to the Main Page. If you have entered a new comment or edited a previous comment, the *Comment* field on the Main Page displays *NEW* in red to indicate to the TCA that a new comment has been entered; see Figure 7.

If the TCA sees that a new comment has been entered, the TCA can click the call sign for that flight to go to the Comment Page and read the comment. In Figure 8 note that the Comment Page shows that the status of the comment is that it is unacknowledged by the TCA. If the TCA then clicks the **TCA Acknowledge** button, which only appears when there is a unacknowledged comment (see Figure 8), the red *NEW* in the *Comment* column on the main page is replaced by a black *Y* to indicate that the TCA has seen the comment entered by the user (see Figure 9). A NAS user will not see the **TCA Acknowledge** button.

5.2 Reading the Data on the Comment Page

If the user clicks on a call sign and causes the Comment Page to be displayed, it shows a number of data fields on each flight. Most of these fields are explained in Section 2.2, but there are a couple of new fields, which can be seen in Figure 6.

- *Last Comment Date*
This shows the time and date when information on the Comment Page was last changed.
- *Comment Status*
This shows whether the TCA has acknowledged the last comment.

Netscape: Pathfinder Flights

File Edit View Go Window Help

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Bookmarks Netsite: http://10.156.237.214:8080/pathfinder/ What's Related

Pathfinder Flights -- Add Pathfinder

ACID	TYPE	ORIG	ETD	DEST	FIX/GATE
BIA789	WDS	PST	1815	DWS	BLUFT

ROUTE

PST . BLUFT . AG99 . STIFF . DSGU . AD00R . RR3 . PAUL . .

Author: Altitude:

Comments:

Sort Order

AIRLINE	TYPE	ORIG	AIRLINE FILTER
<input type="text" value="Y"/>	<input type="text" value="Y"/>	<input type="text" value="Y"/>	<input type="text" value=""/>
ETD	DEST	ALT	FIX/GATE
<input type="text" value="Y"/>	<input type="text" value="Y"/>	<input type="text" value="Y"/>	<input type="text" value="Y"/>

Show

☐ - COMMENTS

Controls

Figure 4: Data Entered to Add Flight BIA789

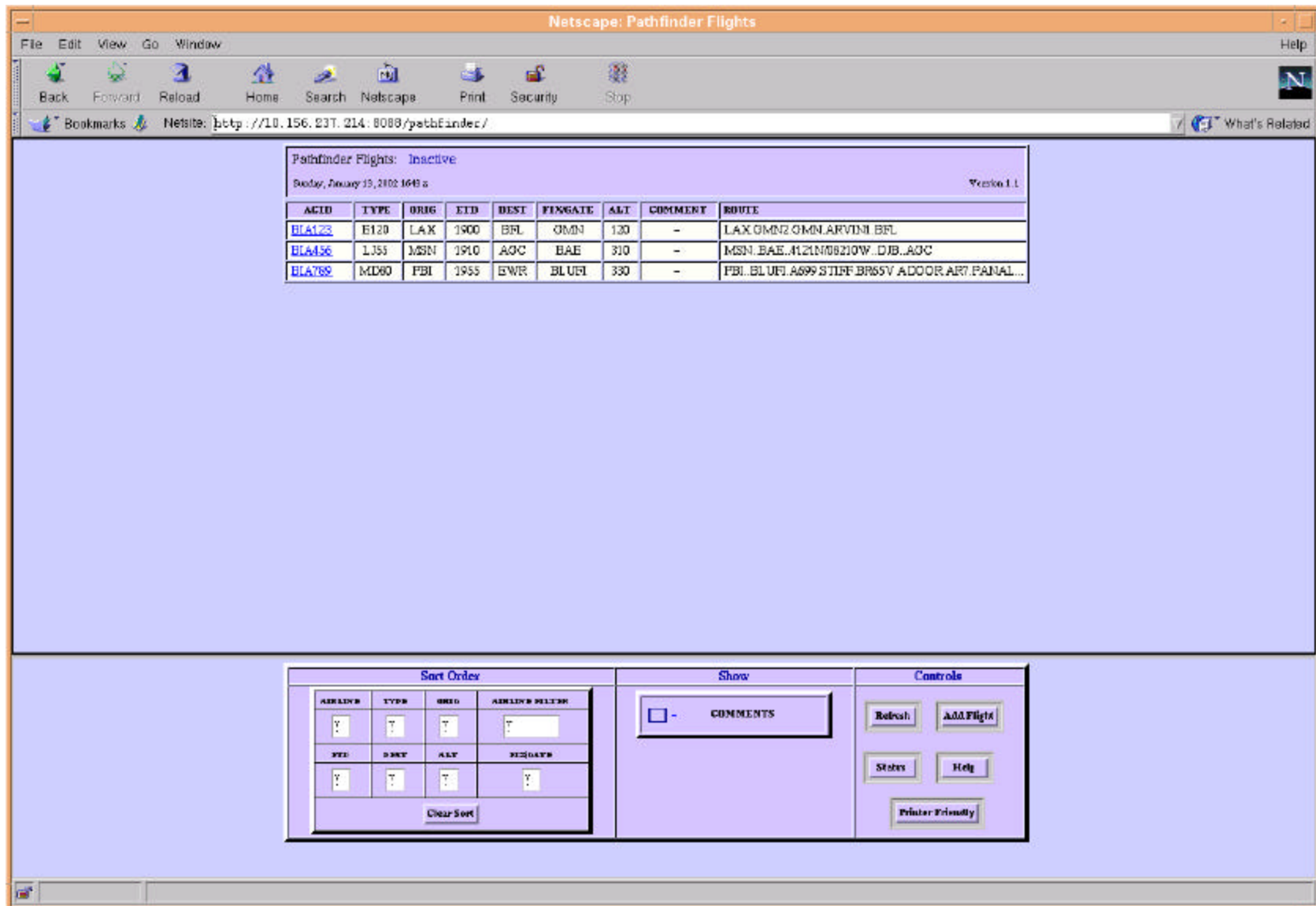


Figure 5: Main Page Showing that Flight BIA789 Has Been Added

Netscape: Pathfinder Flights

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Bookmarks Netsite: http://10.156.237.214:8080/pathfinder/ What's Related

Pathfinder Flights -- Comments

ACID	TYPE	ORIG	ETD	DEST	FIX/GATE
BIA789	W080	DET	1955	SEA	BLUFT

ROUTE

DET, BLUFT, A699, STIFF, 2265U, ADOOR, AK3, PAUL, ...

Last Comment Date: Sunday, January 13, 2002 16:43 z

Comment Status: None

Author: Joe

Altitude: 380

Comments:

THIS FLIGHT READY TO GO ASAP

Delete Flight Cancel Submit Change

Sort Order

AIRLINE	TYPE	ORIG	AIRLINE FILTER
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>

Clear Sort

Show

☐ - COMMENTS

Controls

Refresh Add Flight

Status Help

Printer Friendly

Figure 6: The Comment Page Showing a Comment to be Added for BIA789

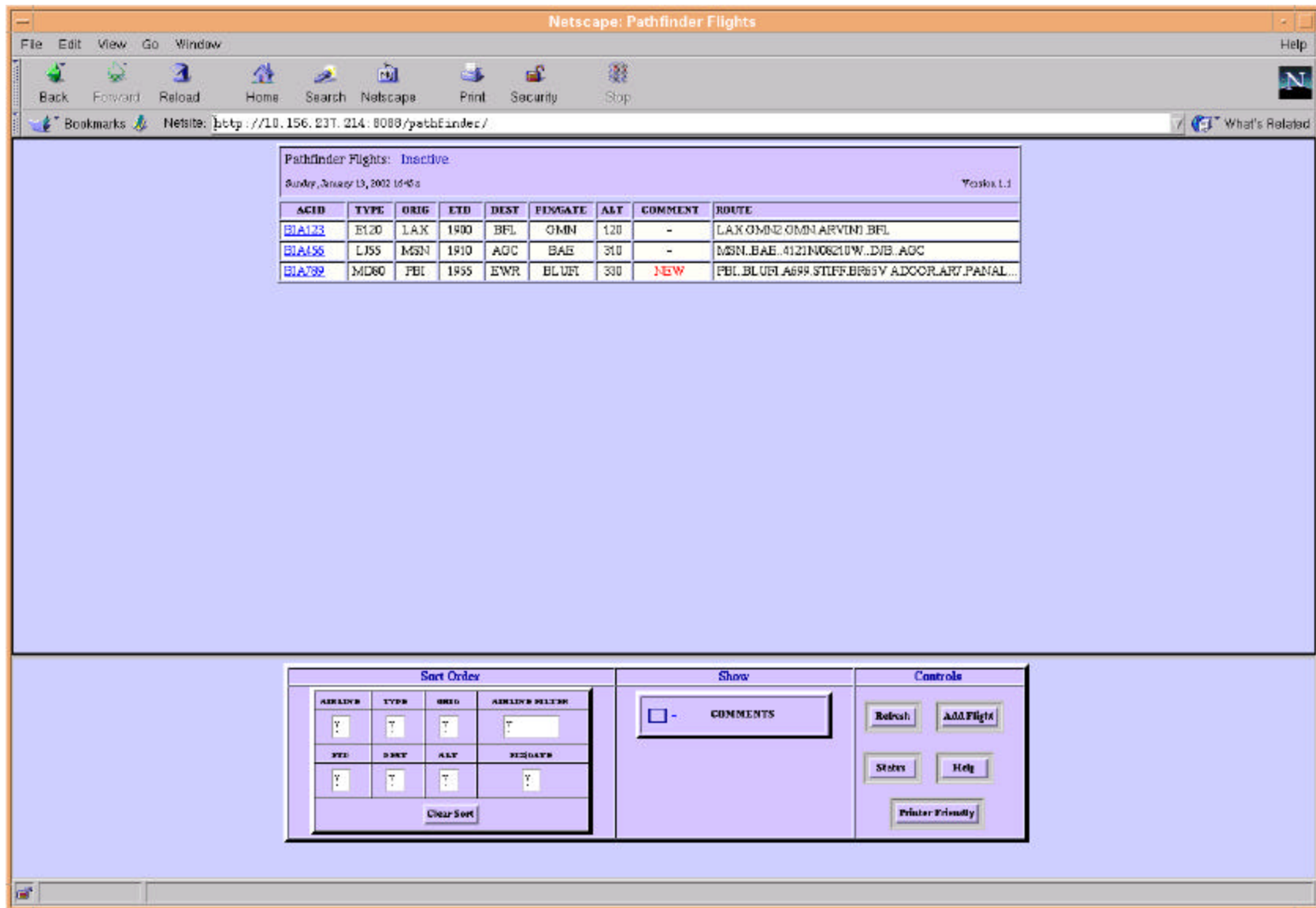


Figure 7: The Main Page Indicating that a Comment Has Been Newly Added for BIA 789

Netscape: Pathfinder Flights

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Bookmarks Netsite: http://10.156.237.214:8080/pathfinder/ What's Related

Pathfinder Flights -- Comments

ACID	TYPE	ORIG	ETD	DEST	FIX/GATE
BIA789	W080	PAT	1955	200	BLUFT

ROUTE

PAT, BLUFT, A699, STIFF, 22650, ADOOR, R23, PAUL, ...

Last Comment Date:
Sunday, January 13, 2002 16:45 z

Comment Status: Unacknowledged by TCA

Author: Joe

Altitude: 380

Comments:

THIS FLIGHT READY TO GO ASAP

Delete Flight TCA Acknowledge Cancel Submit Change

Sort Order

AIRLINE	TYPE	ORIG	AIRLINE DEST
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ETD	DEST	ALT	FIX/GATE
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Clear Sort

Show

☐ - COMMENTS

Controls

Refresh Add Flight

Status Help

Printer Friendly

Figure 8: Comment Page Ready For the TCA to Acknowledge a Comment for Flight BIA789

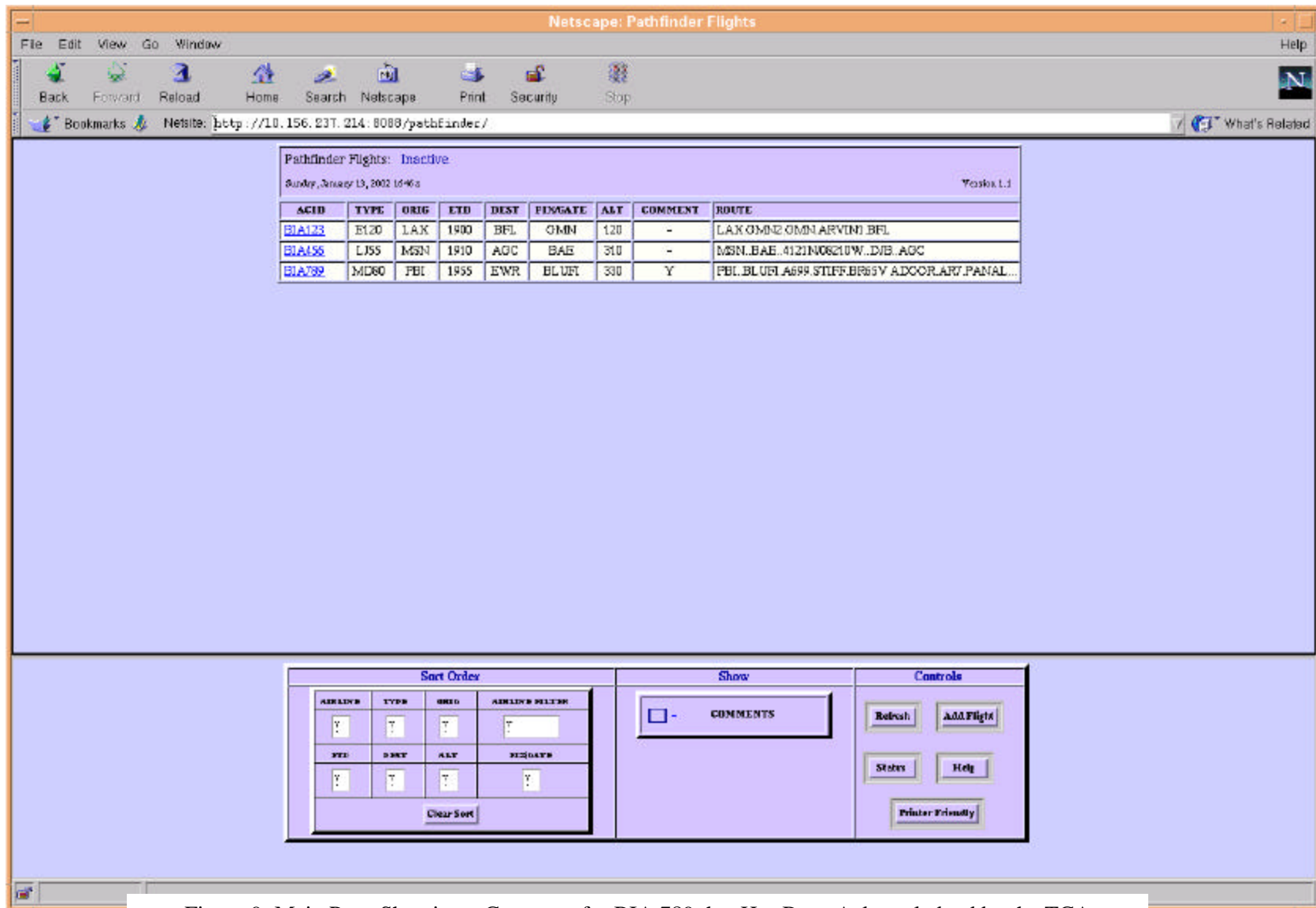


Figure 9: Main Page Showing a Comment for BIA 789 that Has Been Acknowledged by the TCA

5.3 Deleting a Flight

There are two situations in which a user might want to delete a flight from this page.

- To indicate that the flight has taken off.
- To indicate that a flight is no longer considered to be a candidate to be a pathfinder.

It is expected that in normal circumstances it will be a NAS user that deletes a flight.

To delete a flight, do the following.

1. When at the Main Page, click the call sign of a flight to go to the Comment Page.
2. Click the **Delete Flight** button at the bottom of the Comment Page. See Figure 6.
3. When a dialog box asks if you really want to delete the flight, click the **Confirm** button.

If later you realize that the flight should not have been deleted, you can restore it by manually adding it.

6. Status Page

The first line of the Main Page shows whether the Pathfinder Page is active or inactive. For example, Figure 1 shows that the page is inactive.

- *Active* means that a pathfinder event is in progress and that this page is being monitored by the TCA. This tells NAS users that the FAA will see and act on any information added to this page.
- *Inactive* means that no pathfinder event is in progress and that this page is not being monitored by the TCA. This tells NAS users that the FAA probably will not see or act on any information added to this page.

The status of this page is controlled by the FAA; the TCA should be the user who controls the status.

If the TCA clicks the **Status Page** button in the Control Panel (see Figure 1), then he or she will see the Status Page (see Figure 10), which is used to control the status of the Pathfinder Page. If the TCA wants to change the status, he or she can click the radio button next to *Active* or *Inactive* and then click the **Submit** button. For example, Figure 11 shows that the TCA has selected the *Active* button; after clicking the **Submit** button, this will make the Main Page active. Figure 12 shows a Main Page that has been changed to active.

Also, to make sure that a page does not through oversight stay active longer than it should, beside the *Active* radio button is a field that shows how much longer the page will stay active. The TCA can change this value if desired before clicking the **Submit** button. For example, Figure 11 shows that the TCA has changed this time-out value to 90 minutes.

The TCA can go to the Status Page at any time to see how many more minutes the page is currently scheduled to be active. If desired, the TCA can adjust this value. When the time expires, the page's status is automatically changed from active to inactive.

The **Status Page** button in the Control Panel is grayed out for NAS users, so only the FAA can access the Status Page.

7. **Printer Friendly Page**

Since the main page is not convenient for printing or for cutting and pasting, a separate page called the Printer Friendly Page is provided for these purposes.

1. To display this page, click **Printer Friendly** in the Control Panel.
You will see a page that shows the same information as the main page but that is laid out in a fixed-width font. See Figure 13.
2. To print this page, issue your browser's standard print command. (If the Control Panel prints instead of the flight data, click on the flight data, then again issue the print command.)
3. To cut and paste, use your standard cut-and-paste methods.
For example, if you are using Microsoft Windows, you can drag the cursor over a block of text to select it, press <control-c> to copy it, and press <control-v> to paste it.

While the printer friendly page is displayed, it will update just as the Main Page.

If a user wants to remove the Comment and Route fields from the Printer Friendly Page, this can be achieved by clicking the **Abbreviate** button shown in Figure 13. An FAA user might find this useful since, if these two fields are removed, data from this page can be cut and pasted into ETMS e-mail without one line spilling over into the next. If the **Abbreviate** button is clicked, it will change so that it reads **Show All** (see Figure 14); clicking this button will restore the Comment and Route fields.

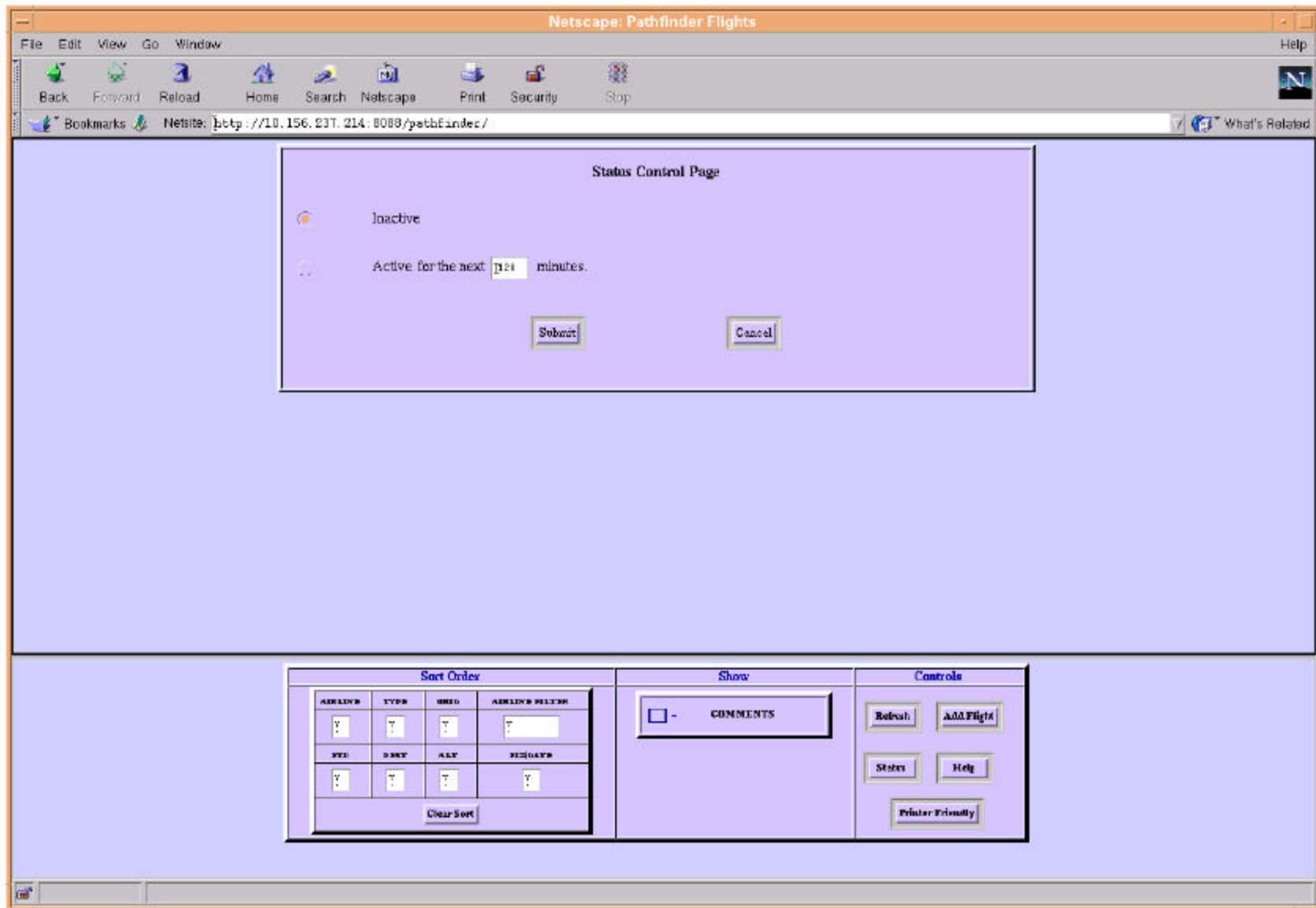


Figure 10: The Status Page

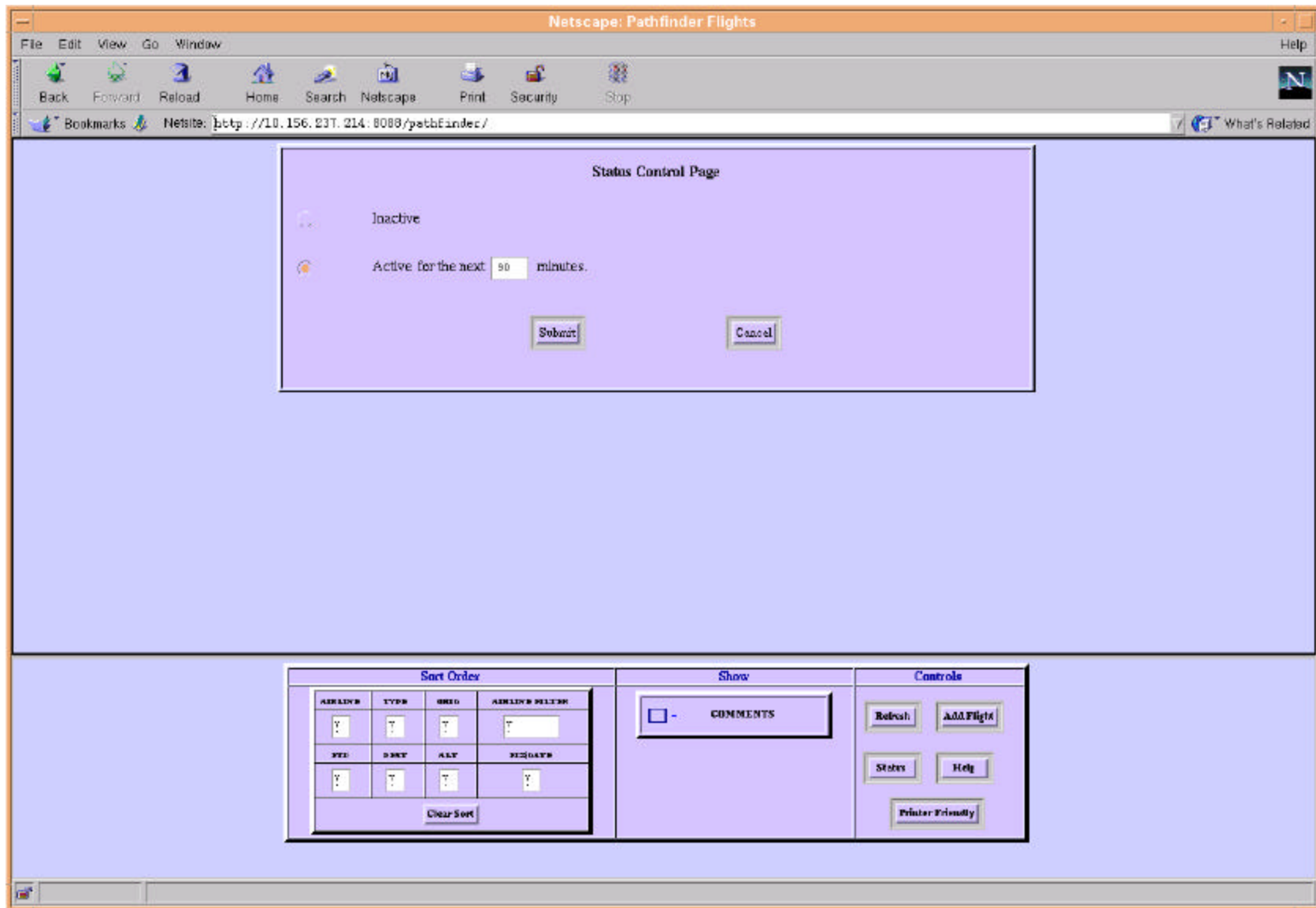


Figure 11: The Status Page Selected to Make the Main Page Active

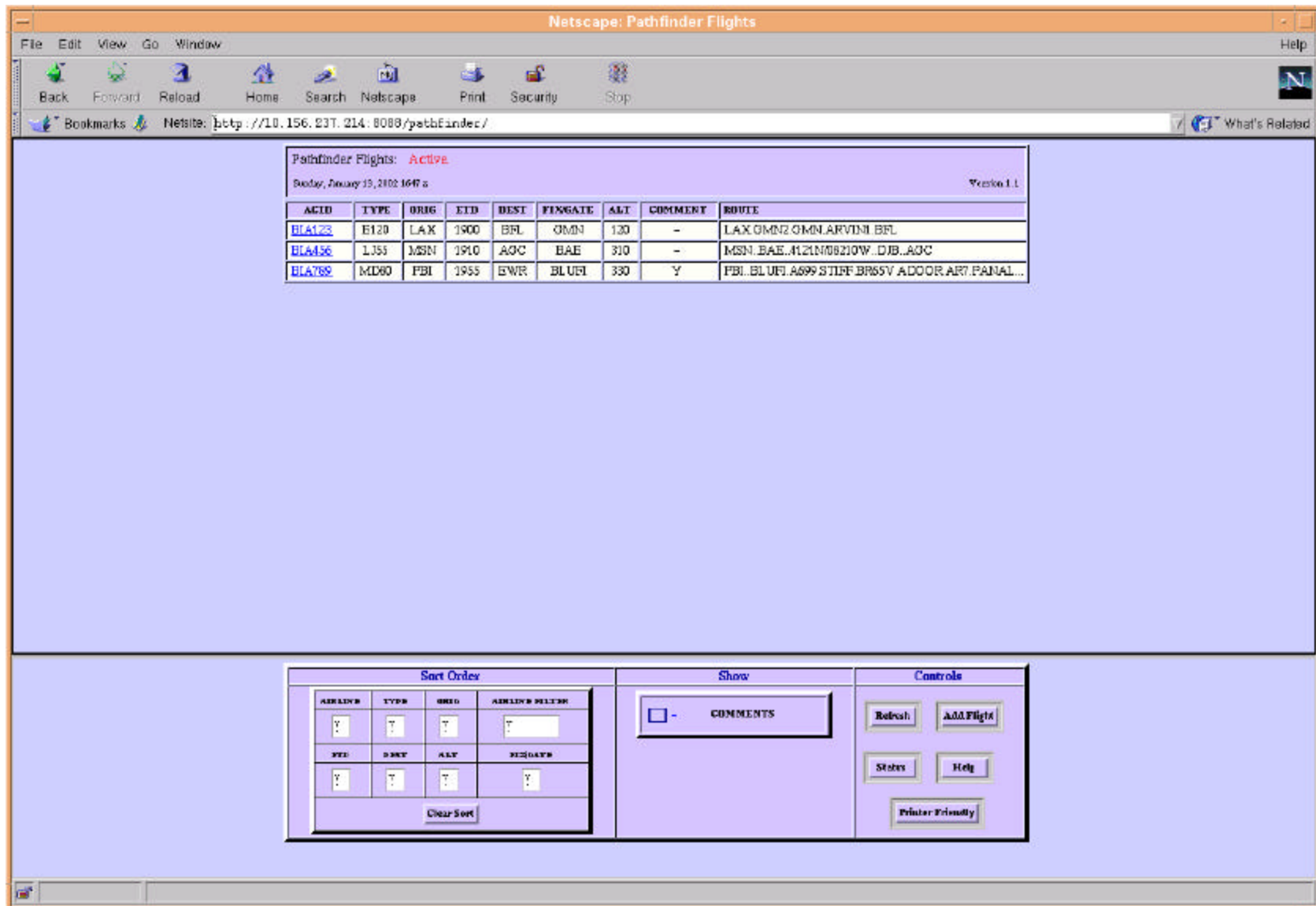


Figure 12: The Main Page Shown as Active

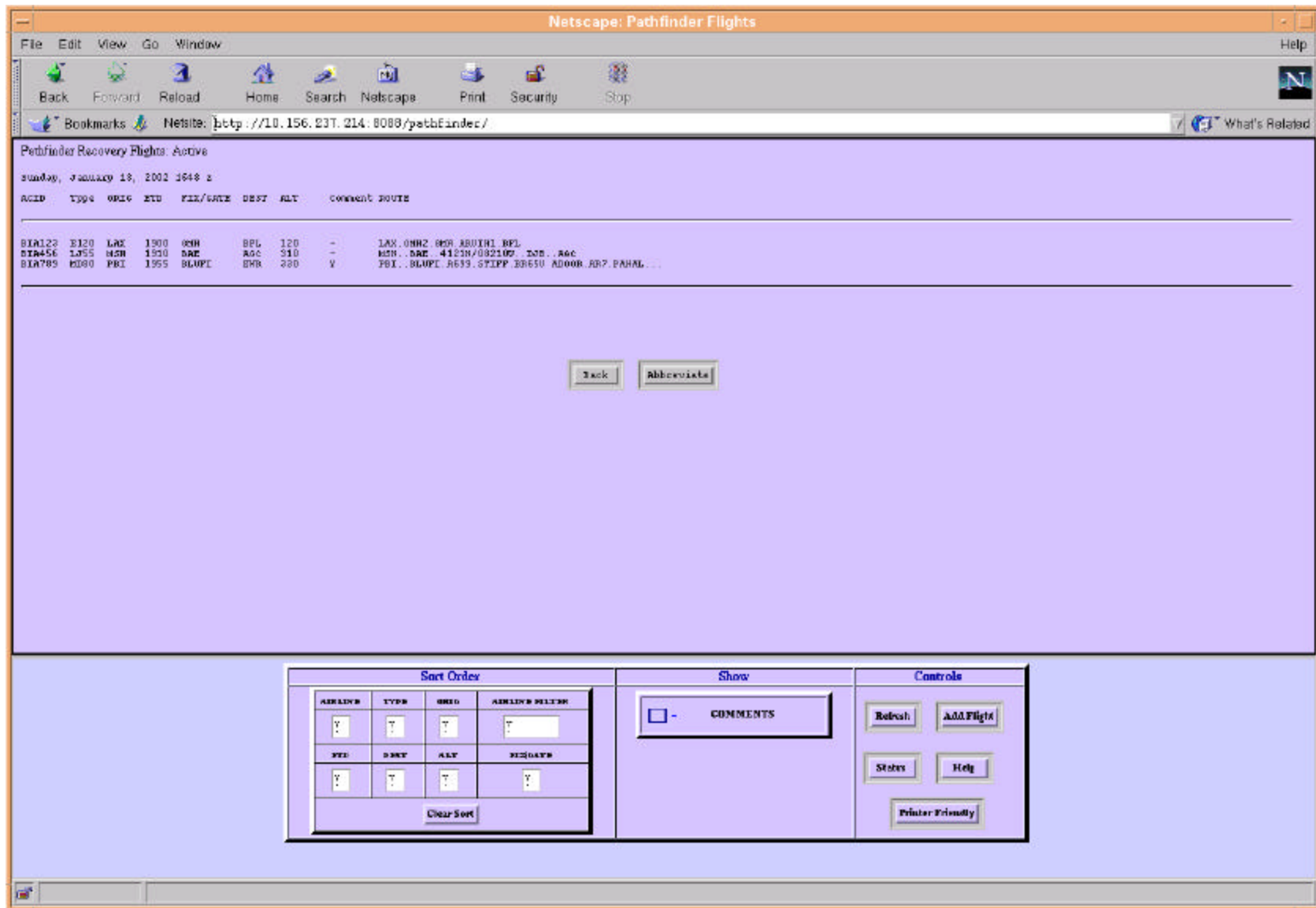


Figure 13: The Printer Friendly Page in its Expanded Form

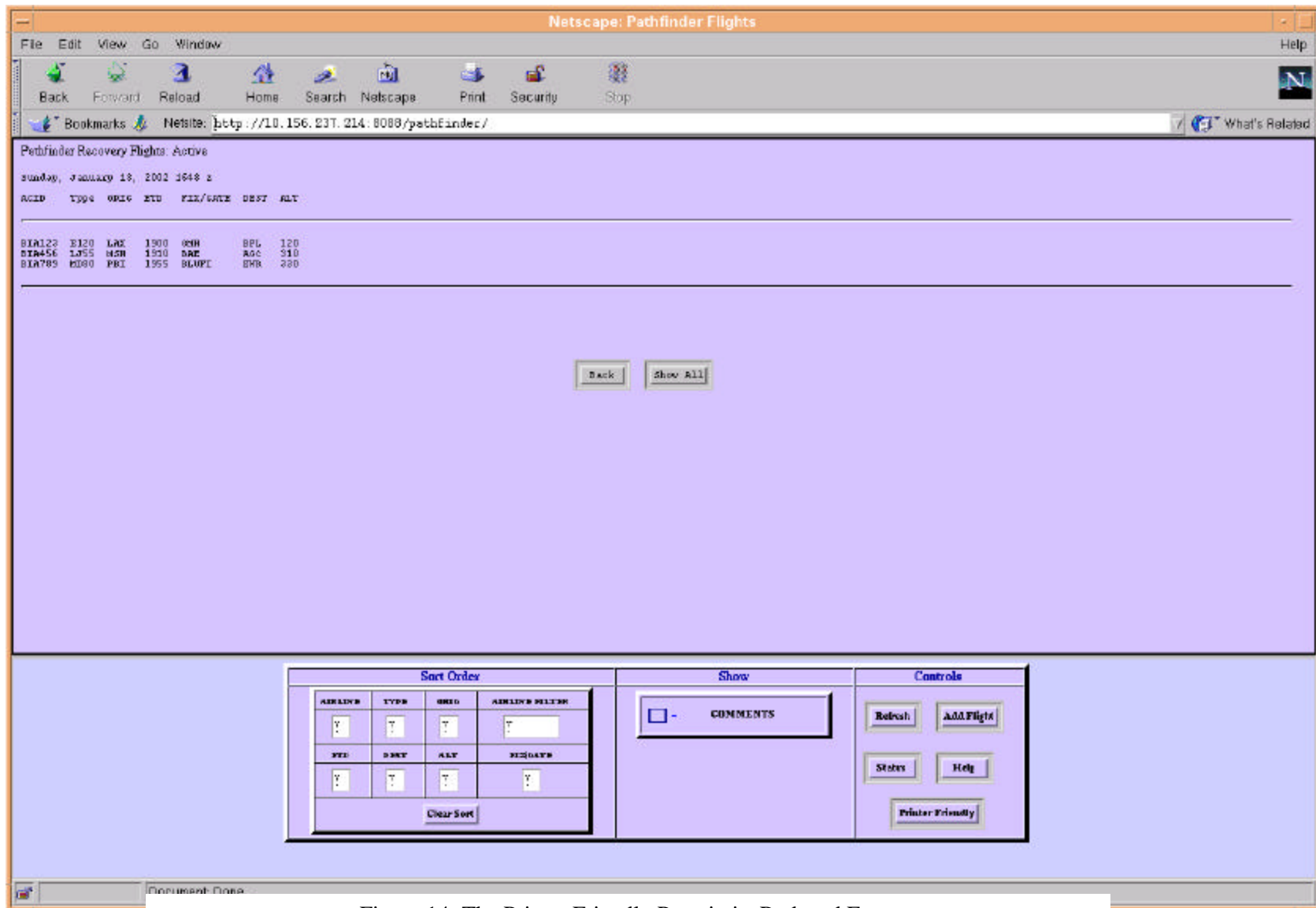


Figure 14: The Printer Friendly Page in its Reduced Form